## ABSTRACT OF THE DISCLOSURE

A method for automatic, decentralized coordination of the movement paths of mobile robots in order to prevent collisions and to detect and resolve mutual blockings. According to the method, a robot receives position information from other robots and establishes a coordinating connection with another robot if the position falls below a minimum allowable distance. One of the robots is then chosen as coordinator and the other robot is chosen as partner. The coordinator initiates an algorithm for the prevention of collisions, wherein a time sequence diagram is determined for the motion path segments of the coordinator and the partner. A robot for detecting robots that are mutually blocking one another in a circuit initiates an algorithm for detecting blocking if the robot has not been given authorization to execute its next motion path segment. An algorithm for resolving the blocking is initiated if robots mutually blocking each other in a circuit are detected by the detecting robot. The algorithm includes a first step and optionally a second step, whereby the sequence for the execution of the next motion path segment of the robots is interchanged during a coordinating connection and the motion paths of one or more robots mutually blocking each other in a circuit are newly planned.